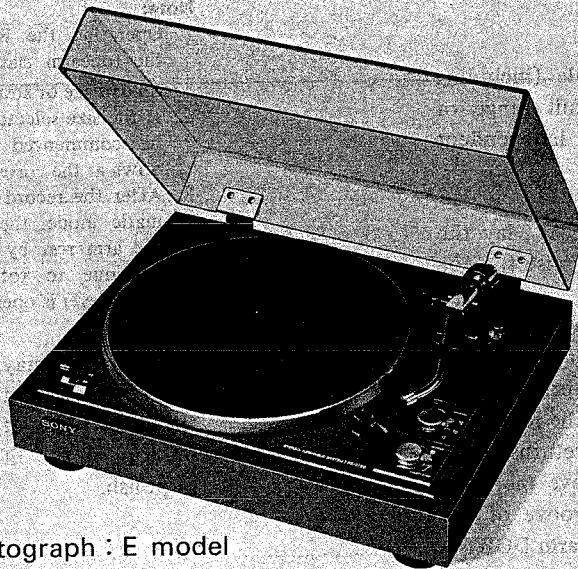


# PS-2700

*US Model  
Canadian Model  
E Model  
AEP Model*



Photograph : E model

## AUTOMATIC STEREO TURNTABLE SYSTEM

### SPECIFICATIONS

#### GENERAL

<b>Power Requirement:</b>	110, 120, 220 or 240 V ac, 50/60 Hz (E, AEP model) 120V ac, 60Hz (US and Canadian model)
<b>Power Consumption:</b>	10W (E model) 12W (US, Canadian model) 18W (AEP model)
<b>Dimensions:</b>	455 (w) x 160 (h) x 370 (d) mm 18 (w) x 6 <sup>3</sup> / <sub>8</sub> (h) x 14 <sup>5</sup> / <sub>8</sub> (d) inches
<b>Weight:</b>	Approx. 8kg, 17 lb 10oz (net) Approx. 10.5kg, 23 lb 2 oz (with shipping carton)

#### TURNTABLE

<b>Platter:</b>	30cm (12 inches), diecasting aluminum alloy
<b>Drive System:</b>	belt drive
<b>Speeds:</b>	33 <sup>1</sup> / <sub>3</sub> , 45 rpm
<b>Wow and Flutter:</b>	± 0.08% (DIN 45507, weighted) Less than 0.06% (NAB, weighted rms)
<b>S/N Ratio:</b>	Greater than 63dB (DIN 45539, B-curve weighted)

#### TONEARM

<b>Type:</b>	Statically balanced, universal
<b>Arm Length:</b>	300mm (11 <sup>7</sup> / <sub>8</sub> inches), overall 216.5mm (8 <sup>1</sup> / <sub>2</sub> inches), pivot-to-stylus
<b>Overhang:</b>	16.5mm ( <sup>2</sup> / <sub>32</sub> inches)
<b>Tracking Error:</b>	+3°, -1°
<b>Tracking-force Adjustment</b>	
<b>Range:</b>	0 - 3g
<b>Shell Weight:</b>	7.5g
<b>Cartridge Weight Range:</b>	4 - 10g

#### CARTRIDGE (VL-32G) (Canadian, E, AEP model)

<b>Type:</b>	Moving magnet type
<b>Output Voltage:</b>	4mV at 1 kHz, 5cm/s
<b>Load Impedance:</b>	50k ohms
<b>Tracking Force:</b>	2g
<b>Stylus:</b>	Conical 0.5 mil diamond (ND-134G)
<b>Weight:</b>	5.5g

#### SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

# SONY®

## SERVICE MANUAL

**PS-2700**

**MODEL IDENTIFICATION**

— Specification Label —

**US, Canadian model**

<b>SONY®</b>	<b>STEREO TURNTABLE SYSTEM</b>
	MODEL NO. <b>PS-2700</b>
	AC 120V 60Hz 12W
	SERIAL NO. _____
	MADE IN _____

**E model**

<b>SONY®</b>	<b>STEREO TURNTABLE SYSTEM</b>
	MODEL NO. <b>PS-2700</b>
	AC 110, 120, 220, 240V 50/60Hz 10W
	SERIAL NO. _____
	MADE IN _____

**AEP model**

<b>SONY®</b>	<b>STEREO TURNTABLE SYSTEM</b>
	MODEL NO. <b>PS-2700</b>
	~ 110, 120, 220, 240V 50/60Hz 18W
	SERIAL NO. _____
	MADE IN JAPAN

## SECTION 2 DISASSEMBLY

### WARNING

Unplug the ac power cord before starting any disassembly or replacement procedures.

#### 2-1. TOP COVER REMOVAL

1. Open the top cover, and then pull it up as shown in Fig. 2-1.

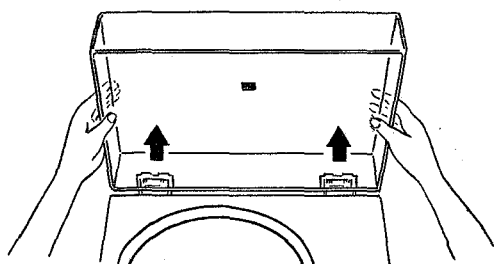


Fig. 2-1

#### 2-2. TURNTABLE PLATTER REMOVAL

1. Remove the turntable platter mat from the turntable platter.
2. Turn the turntable platter so that the either hole of the turntable platter is on the motor pulley.
3. Remove the drive belt and then lift the turntable straight up.

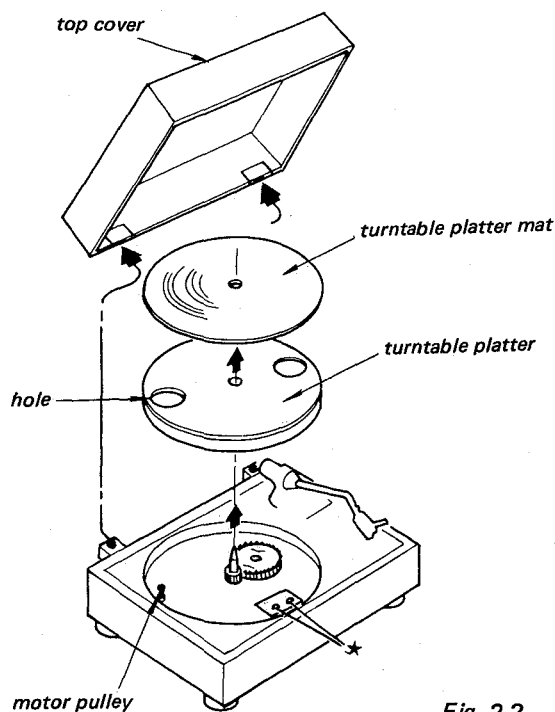


Fig. 2-2

#### Note:

The motor mechanism is locked by two red-painted transit screws. When operating the player, remove two screws and keep it in the place marked \* in Fig. 2-2.

#### 2-3. BOTTOM PLATE REMOVAL

1. Remove the turntable platter. Don't remove the top cover.
2. Put and lock the tonearm on the tonearm rest.
3. Place the set up-side-down.
4. Remove four feet and ten tapping-screws as shown in Fig. 2-3.

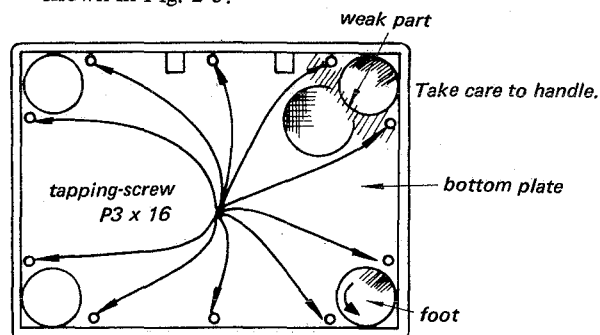


Fig. 2-3

#### 2-4. CASE REMOVAL

1. Remove the bottom plate as described in Procedure 2-3.
2. Remove four screws and pull the cord holder off as shown in Fig. 2-4.

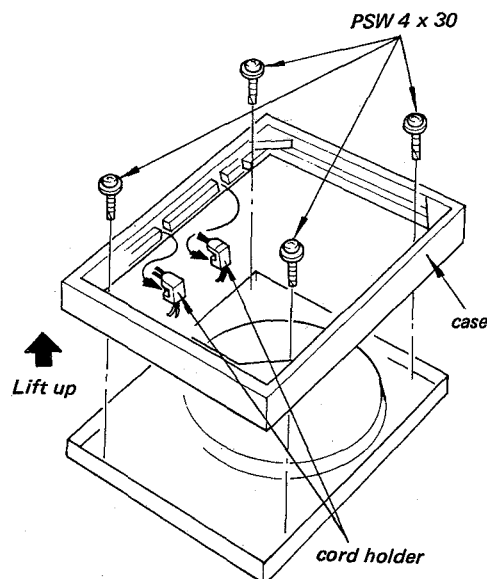


Fig. 2-4

## 2-5. SHELL HEAD REMOVAL

### Note:

The four lead wires for shell head difficults to pass through the tonearm pipe. Thus, use the former lead wires when replacing the shell head.

1. Unsolder the output leads from the tonearm on the terminal board as shown in Fig. 2-5.
2. Remove the bottom plate and the turntable platter.
3. Remove two shell-head-adjust-screws as shown in Fig. 2-6.
4. Pull out the shell head connector about 3cm ( $1\frac{3}{16}$  inches) slowly while pushing the four leads into the tonearm pipe from the tonearm base side.
5. Unsolder the four leads and then replace the shell head. Temporarily secure with two screws as shown in Fig. 2-6.
6. Install the cartridge to the tonearm.
7. Fix two shell-head-adjust-screws after making sure that the position of cartridge is as shown in Fig. 2-7.

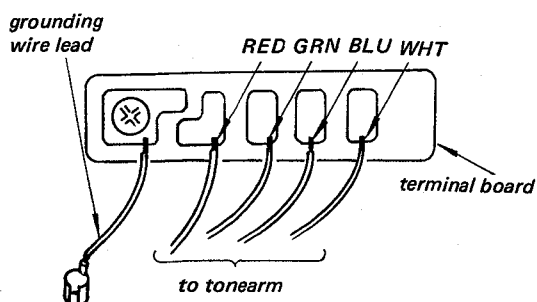


Fig. 2-5

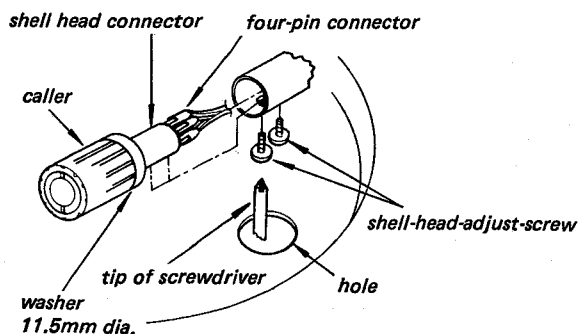


Fig. 2-6

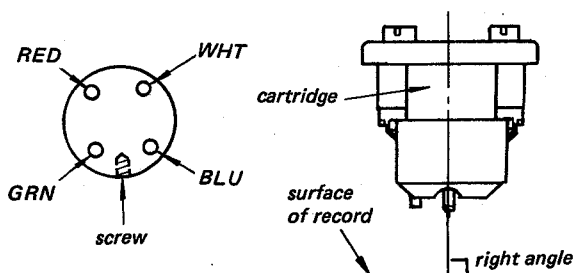


Fig. 2-7

## 2-6. TONEARM REMOVAL

1. Remove the top cover, the shell head, the counterweight, the turntable platter, the bottom plate and the case.
2. Unsolder the leads from the tonearm on the terminal.
3. Pull out the grounding wire as shown in Fig. 2-8.
4. Loosen two hexagonal screws, then remove the brake drum as shown in Fig. 2-8.
5. Remove three hexagonal screws, then draw out the tonearm base while turning it clockwise about 2mm on the circumference as shown in Fig. 2-9.
6. Remove the tonearm carefully.

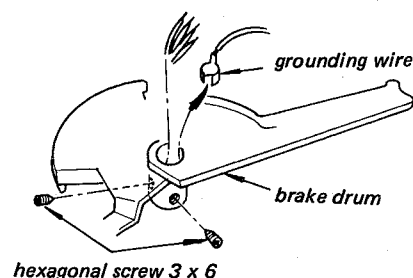


Fig. 2-8

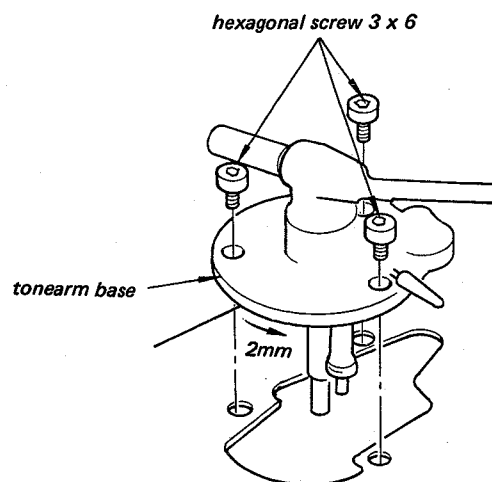


Fig. 2-9

## 2-7. TONEARM PIPE REMOVAL

1. Remove the tonearm as described in Procedure 2-6.
2. Remove the 12mm dia. retaining ring for taking off the tonearm as shown in Fig. 2-10.
3. Replace the pipe, the rubber for pipe and the connector as shown in Fig. 2-11.
4. Temporarily secure the pipe with two hexagonal screws and the screw B2.6 x 6 as shown in Fig. 2-11.
5. After replacing the new arm pipe, install the tonearm so that the three portions of A, B and C keep the same height as shown in Fig. 2-12.
6. Remove the tonearm again from the tonearm base. Fix two hexagonal screws and the screw B2.6 x 6.

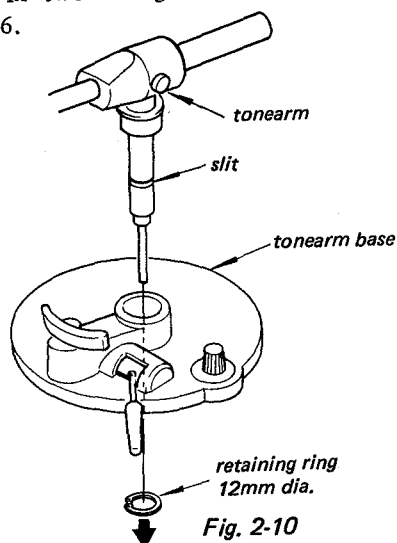


Fig. 2-10

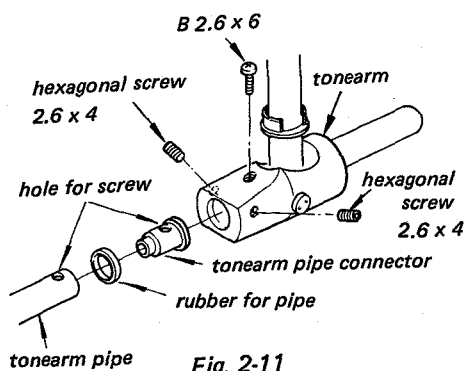


Fig. 2-11

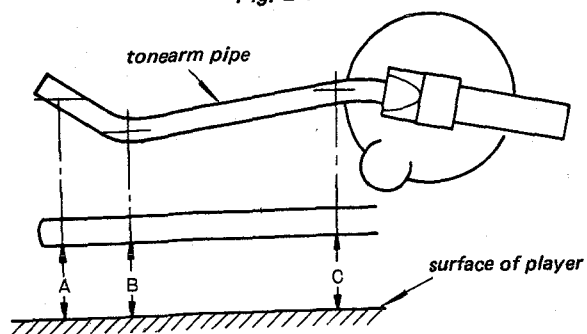


Fig. 2-12

## 2-8. COUNTERWEIGHT SHAFT REMOVAL

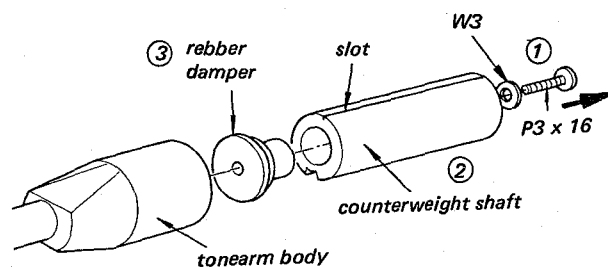


Fig. 2-13

Note: Install the shaft slot-side-up certainly.

## 2-9. LATERAL BALANCER REMOVAL

Loosen the lateral balance nut at first, and then remove the lateral balance shaft.

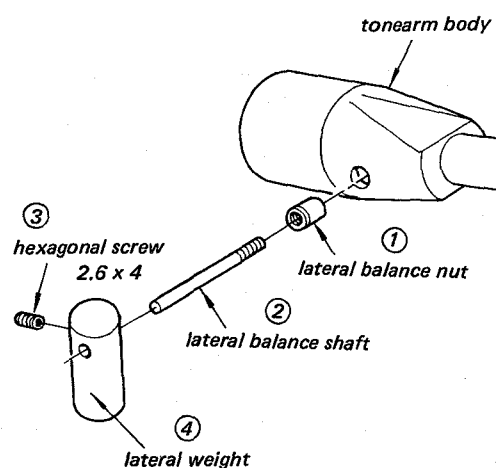


Fig. 2-14

Note:

The lateral balance shaft should be jut out a few inches from the lateral weight. Also, keep the lateral weight right angle against the tonearm body as shown below.

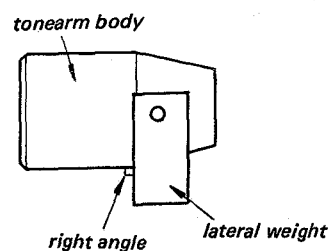


Fig. 2-15

## 2-10. MAIN GEAR REMOVAL

1. Remove the turntable platter.
2. Set the main gear as shown in Fig. 2-16.
3. Remove the E-ring (E5)
4. Replace the main gear.

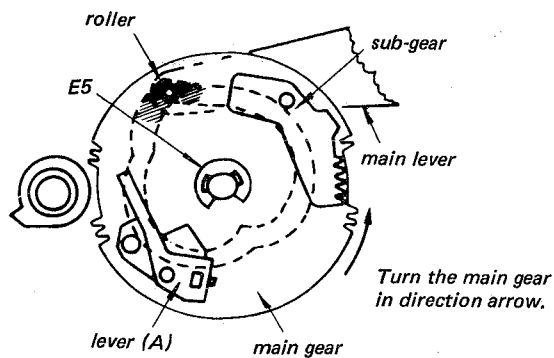


Fig. 2-16

### Note:

- Don't forget to install the roller.
- The roller should be geared with the slot of the heart-shaped cam accurately.
- The sub-gear and the lever (A) should be moved smoothly and kept a horizontal motion.

## 2-11. CENTER SHAFT REMOVAL

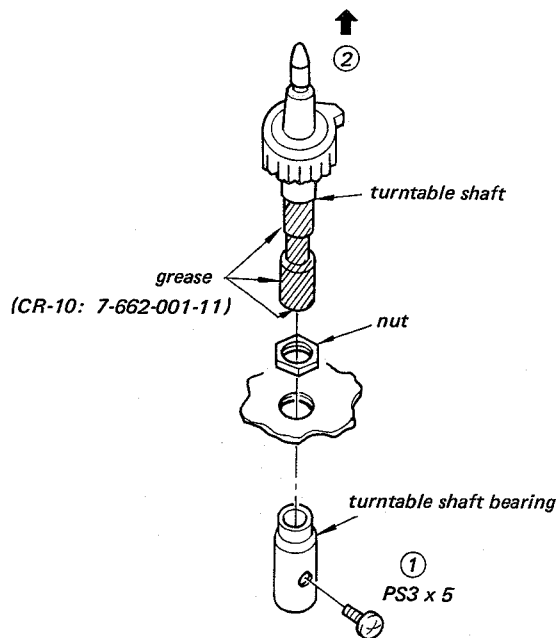


Fig. 2-17

### Note:

- When installing, lubricate the turntable shaft with grease.

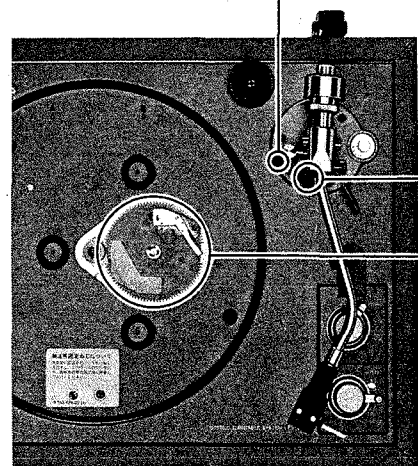
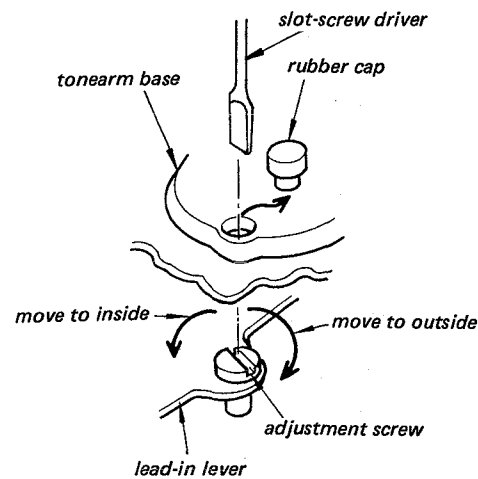
## 2-12. TURNTABLE SHAFT BEARING

1. Remove the turntable shaft.
2. Remove the nut as shown in Fig. 2-17.
3. Replace the turntable shaft bearing.

## SECTION 3 ADJUSTMENT

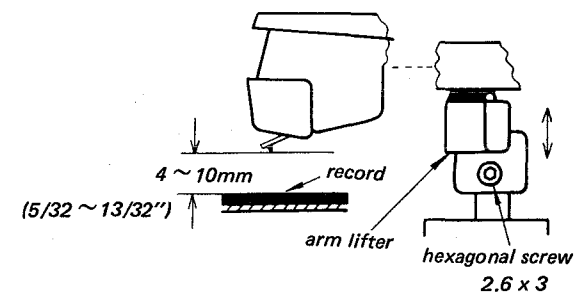
### TONEARM LEAD-IN POSITION ADJUSTMENT

Remove the rubber cap on the tonearm base. Adjust the adjustment screw for the tonearm lead-in lever with a slot-screwdriver so that the stylus lowers correctly on the record at fully automatic operation.



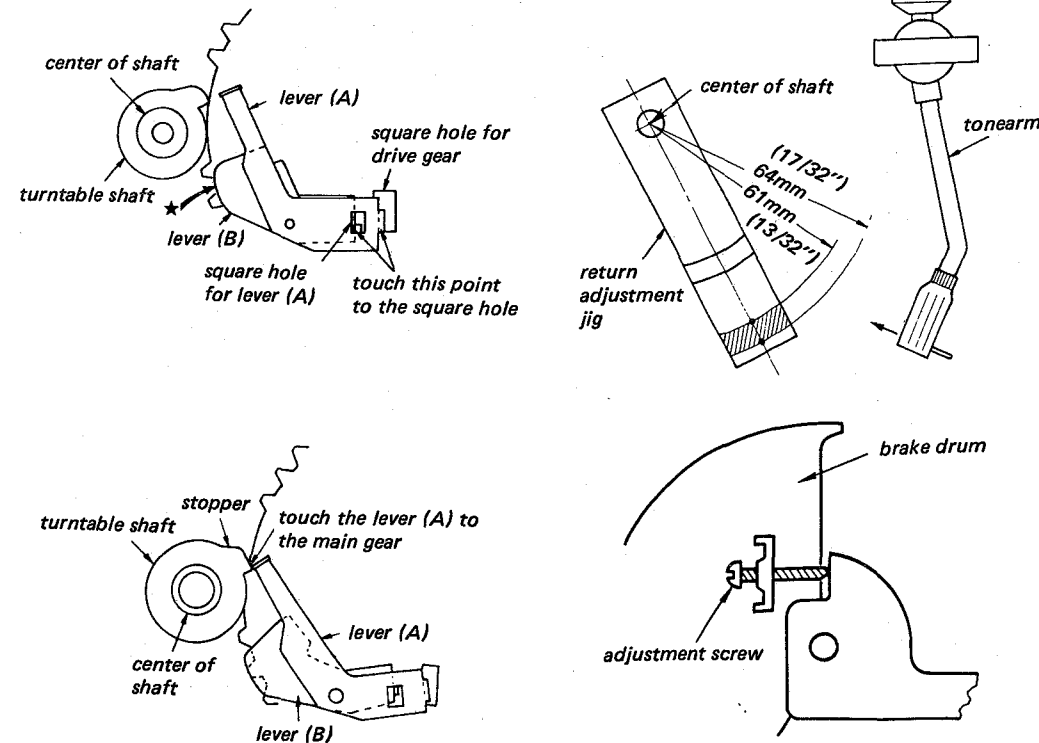
### TONEARM HEIGHT ADJUSTMENT

When the tonearm is lifted up with the arm lifter at manual operation, adjust the hexagonal screw as shown below.



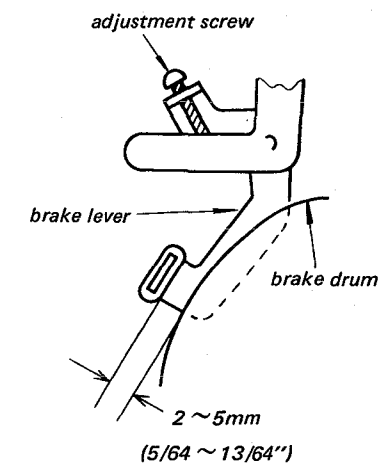
### AUTOMATIC RETURN POSITION ADJUSTMENT

1. Remove the turntable platter mat and the turntable platter.
2. Put the tonearm on the arm rest.
3. Disconnect the power cord, then set the REPEAT, START/STOP control to START/STOP position. Turn the turntable shaft clockwise, engage the main gear with the turntable shaft. Then, turn the main gear once to detach it from the turntable shaft.
4. Set the lever (B) in direction arrow marked ★.
5. Fit the return adjustment jig (Part Number 9-911-814-01) in the turntable shaft.
6. Adjust the automatic return position adjustment screw so that the stylus position is 61 to 64mm on the return adjustment jig when the tip of lever (A) touches the turntable shaft as shown in figure.
7. Make sure that the return action is done completely.



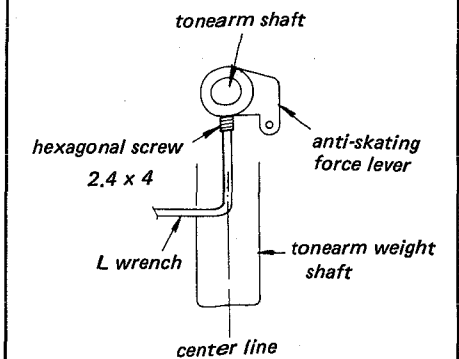
### BRAKE LEVER ADJUSTMENT

Set the size selector lever to MANUAL. Adjust the adjustment screw as shown below at stop mode.



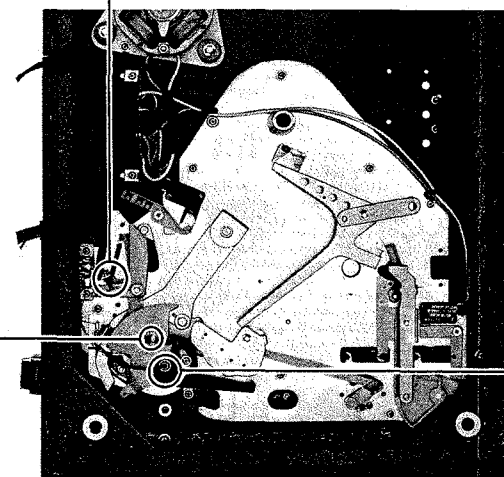
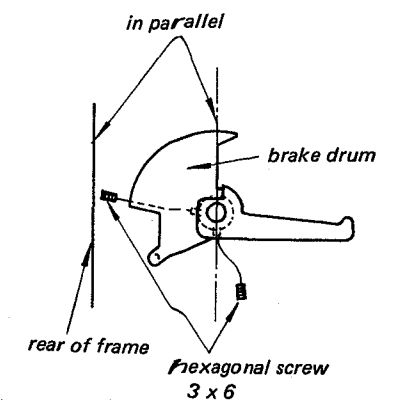
### ANTI-SKATING FORCE COMPENSATOR ADJUSTMENT

Fix the hexagonal screw so that L wrench goes along the center line on the tonearm weight shaft as shown below.



### BRAKE DRUM POSITION ADJUSTMENT

Adjust the hexagonal screw as shown below when the tonearm puts on the arm rest.

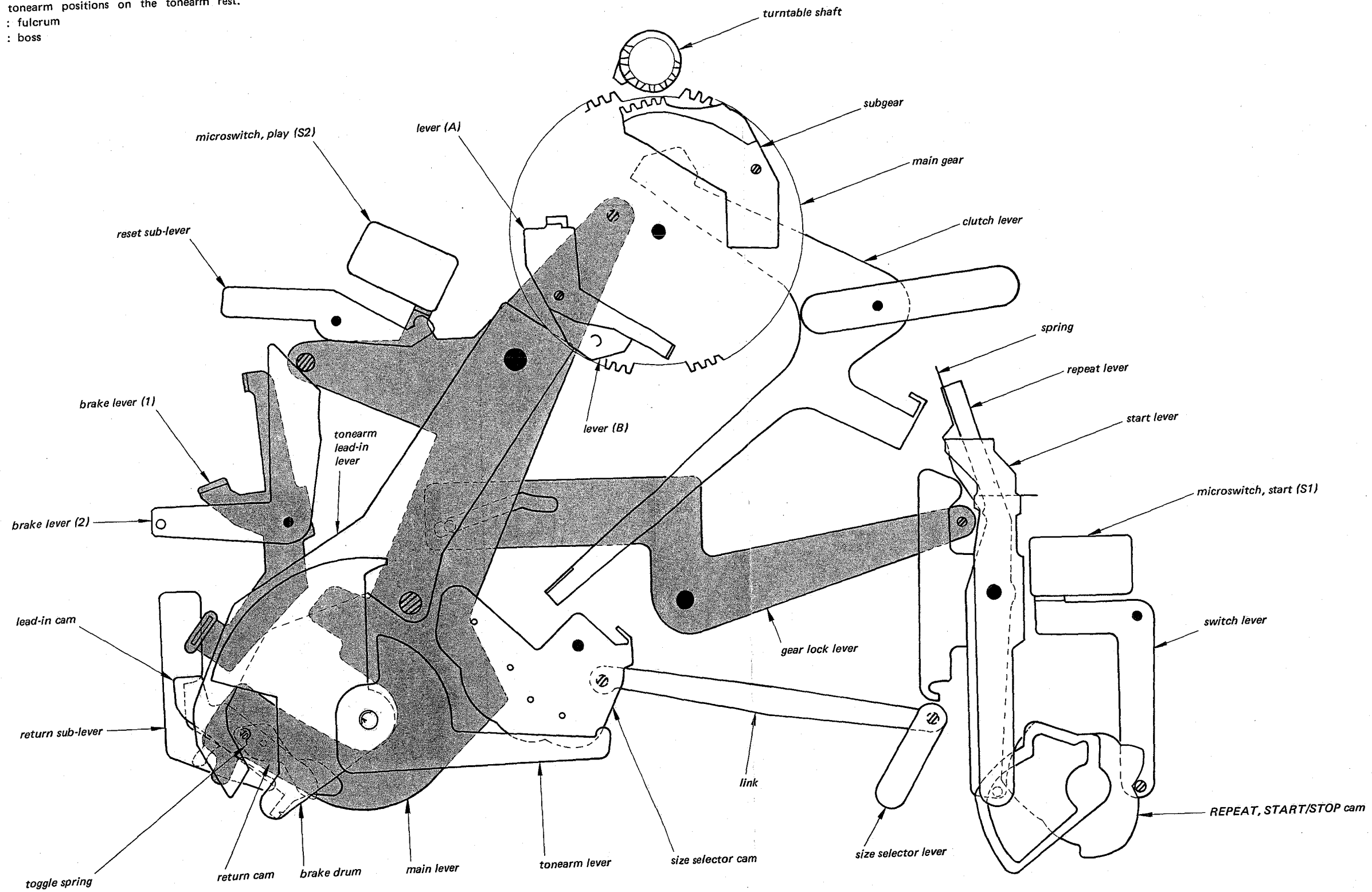


## SECTION 4 MECHANICAL OPERATION

### 4-1. AUTOMATIC OPERATION MECHANISM

**Note:**

- The size selector lever positions to MANUAL.
- The REPEAT, START/STOP lever is released.
- The tonearm positions on the tonearm rest.
- ● : fulcrum
- ⊙ : boss



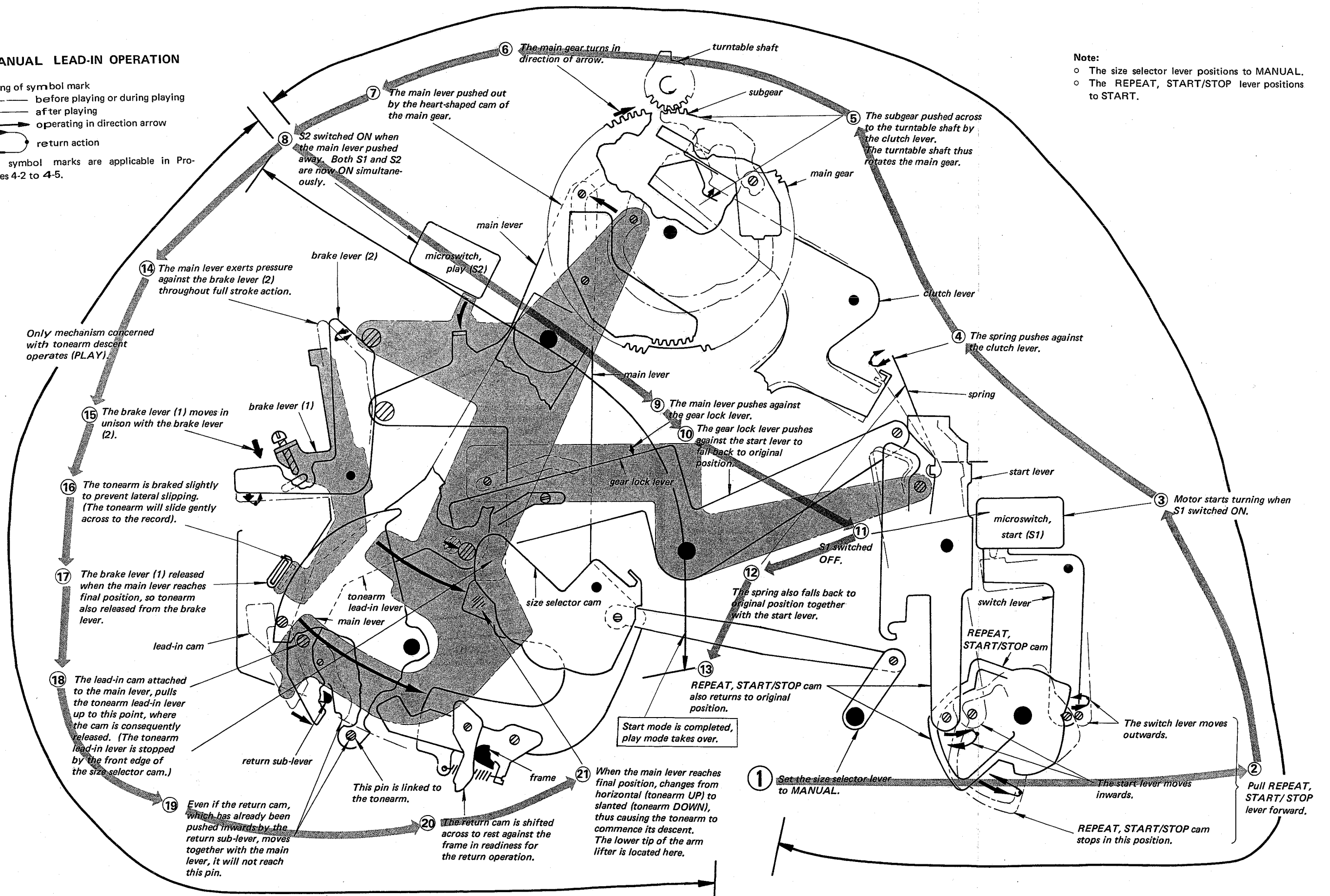


## 4-2. MANUAL LEAD-IN OPERATION

- o Meaning of symbol mark
- before playing or during playing
  - after playing
  - operating in direction arrow
  - ↶ return action
- These symbol marks are applicable in Procedures 4-2 to 4-5.

## Note:

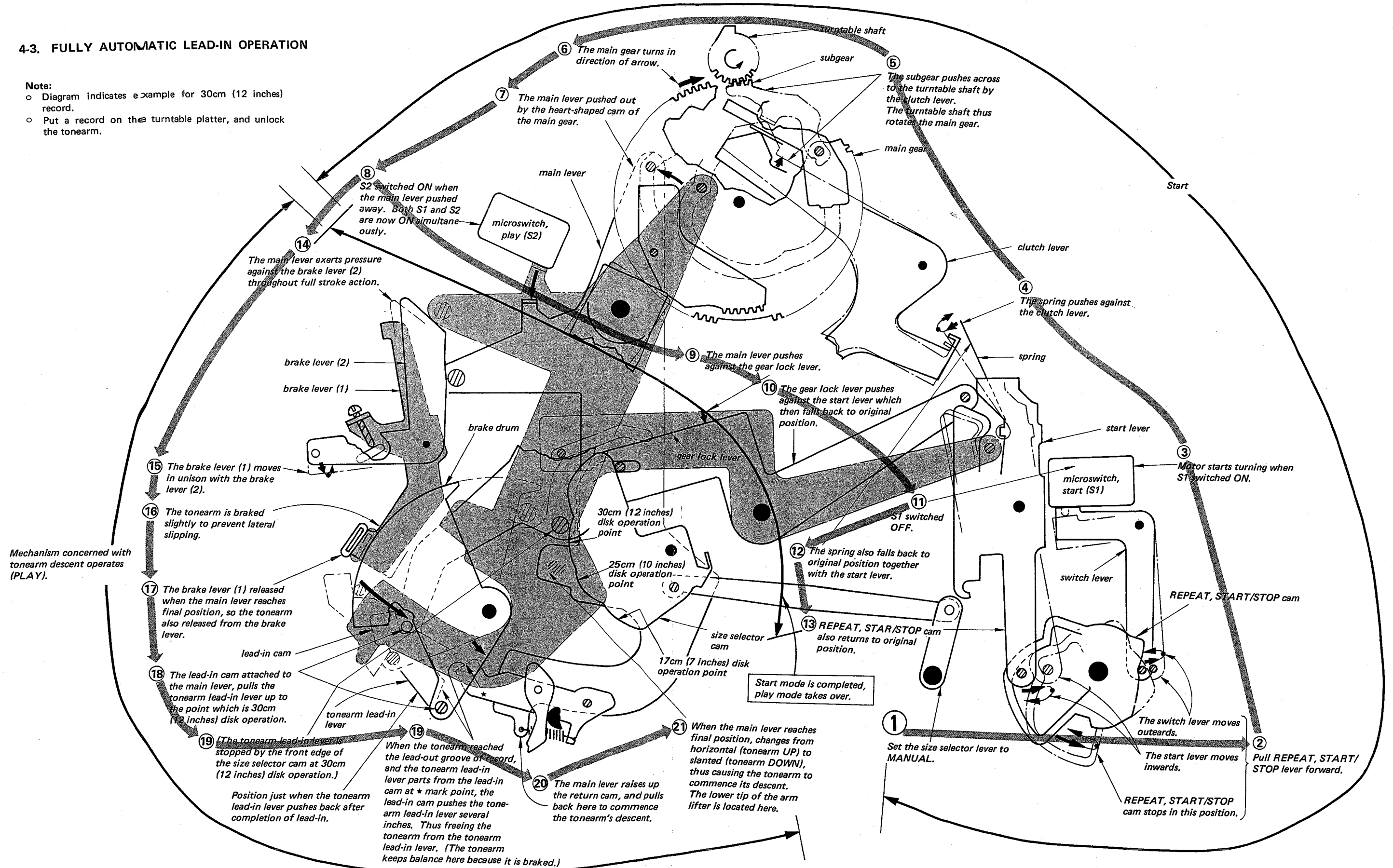
- o The size selector lever positions to MANUAL.
- o The REPEAT, START/STOP lever positions to START.



## 4-3. FULLY AUTOMATIC LEAD-IN OPERATION

## Note:

- Diagram indicates example for 30cm (12 inches) record.
- Put a record on the turntable platter, and unlock the tonearm.



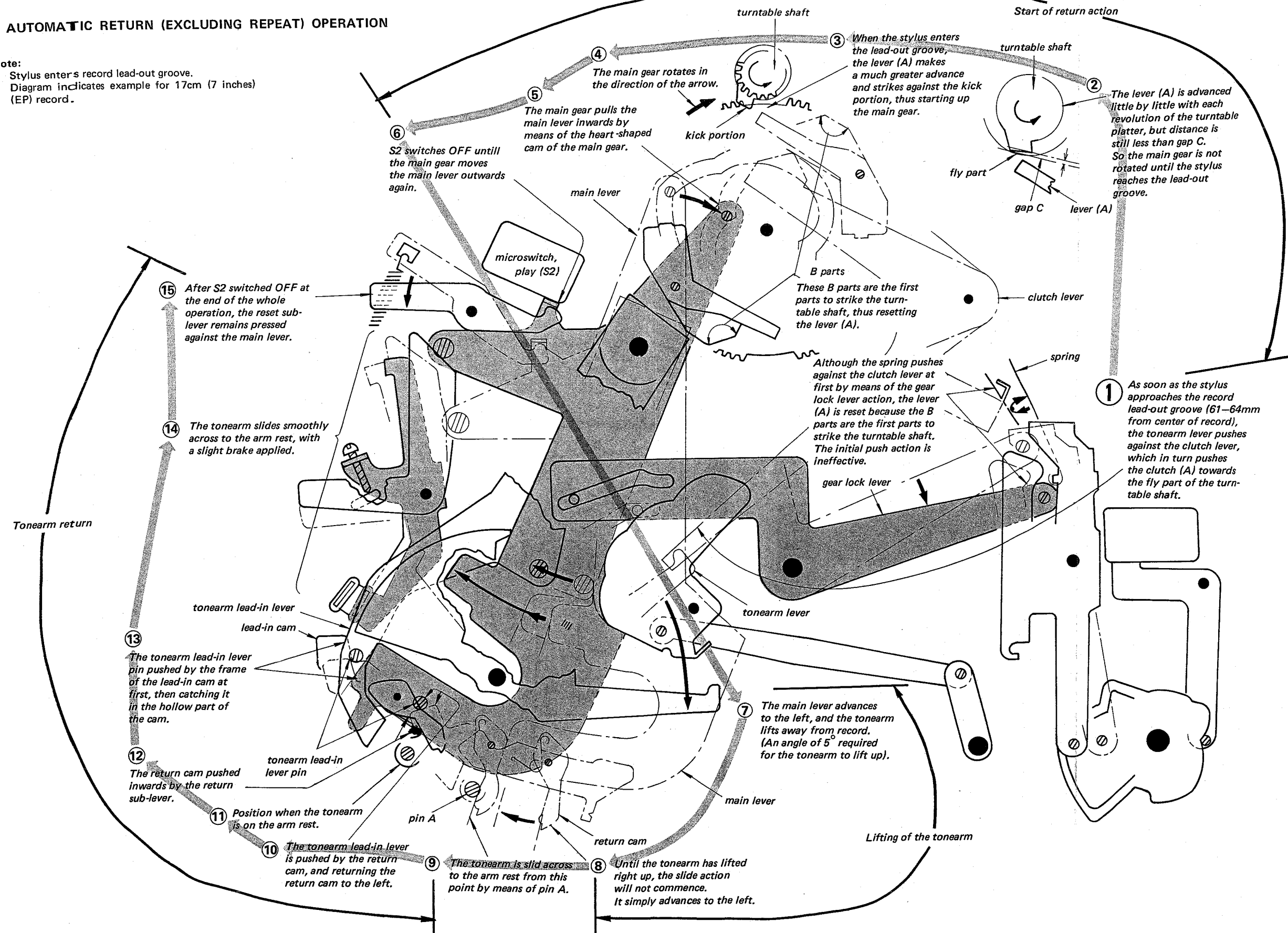
PS-2700

PS-2700

#### 4.4. AUTOMATIC RETURN (EXCLUDING REPEAT) OPERATION

**Note:**

- Stylus enters record lead-out groove.
- Diagram indicates example for 17cm (7 inches) (EP) record.

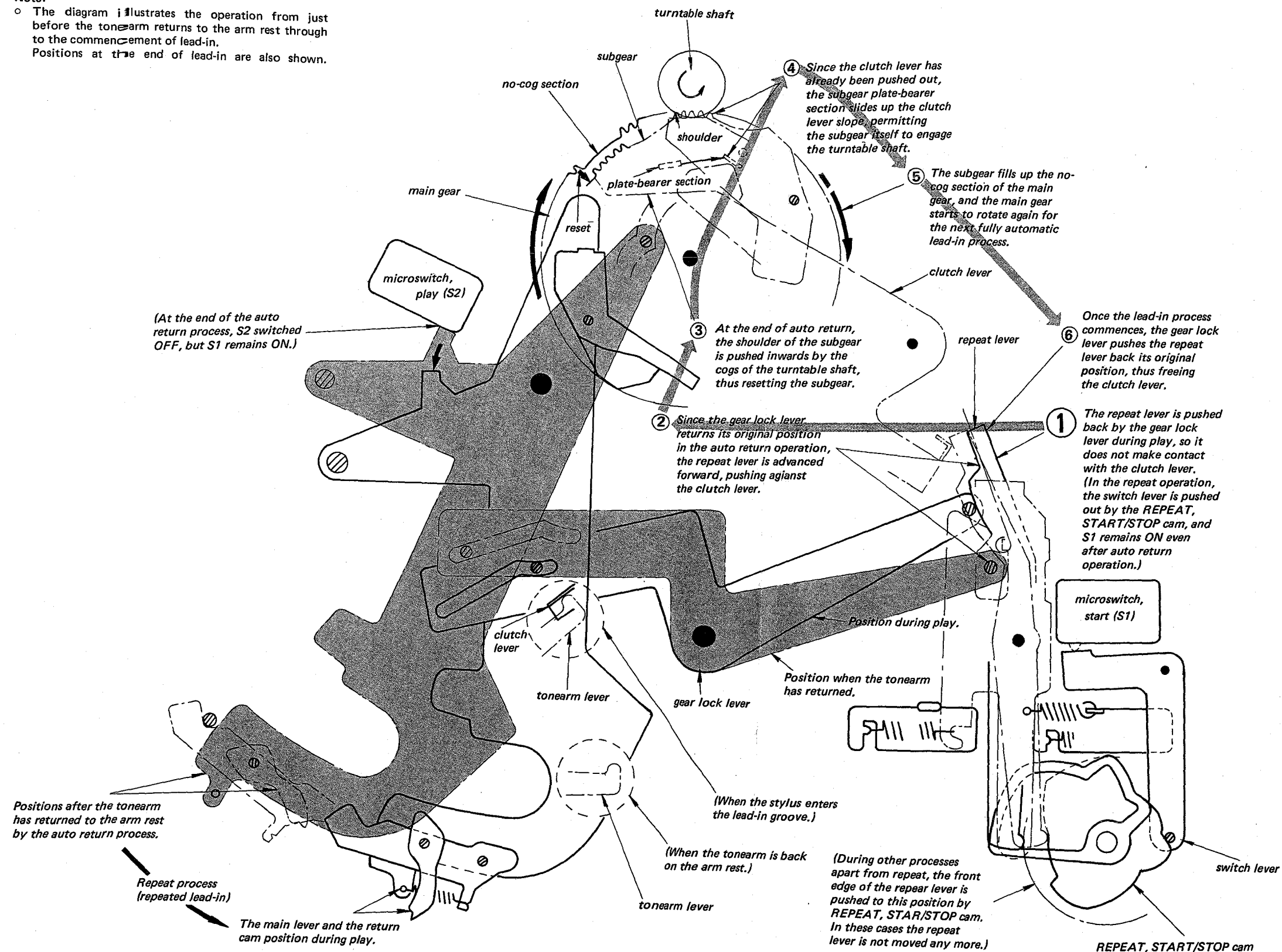


# PS-2700 PS-2700

## 4-5. REPEAT OPERATION

### Note:

- The diagram illustrates the operation from just before the tonearm returns to the arm rest through to the commencement of lead-in. Positions at the end of lead-in are also shown.





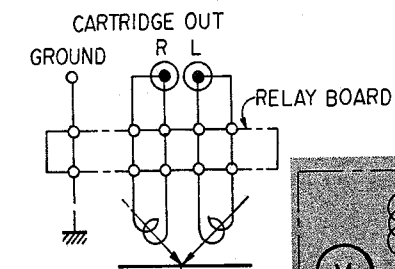
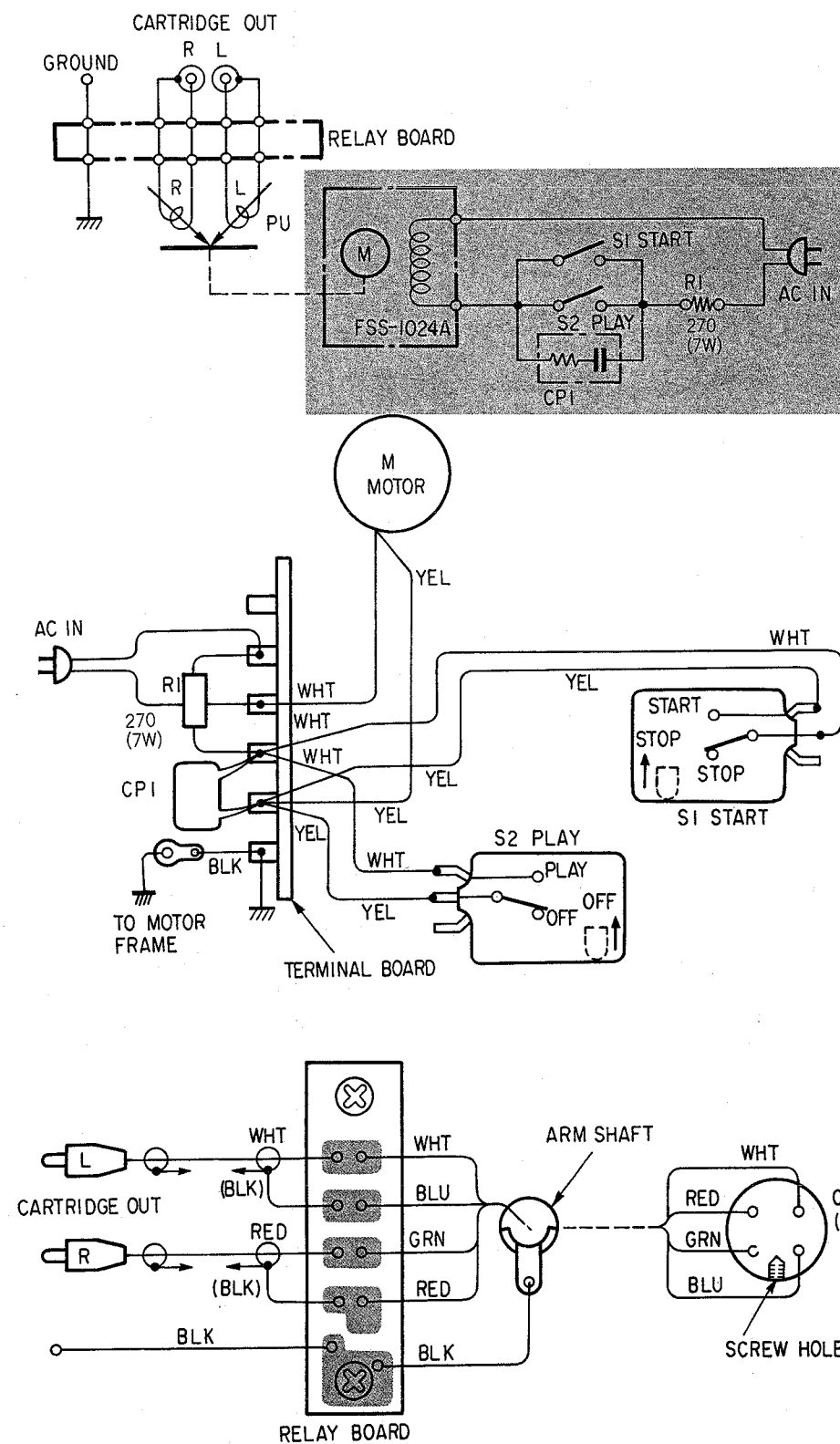
PS-2700

PS-2700

## SECTION 5 DIAGRAMS

US model  
Canadian model

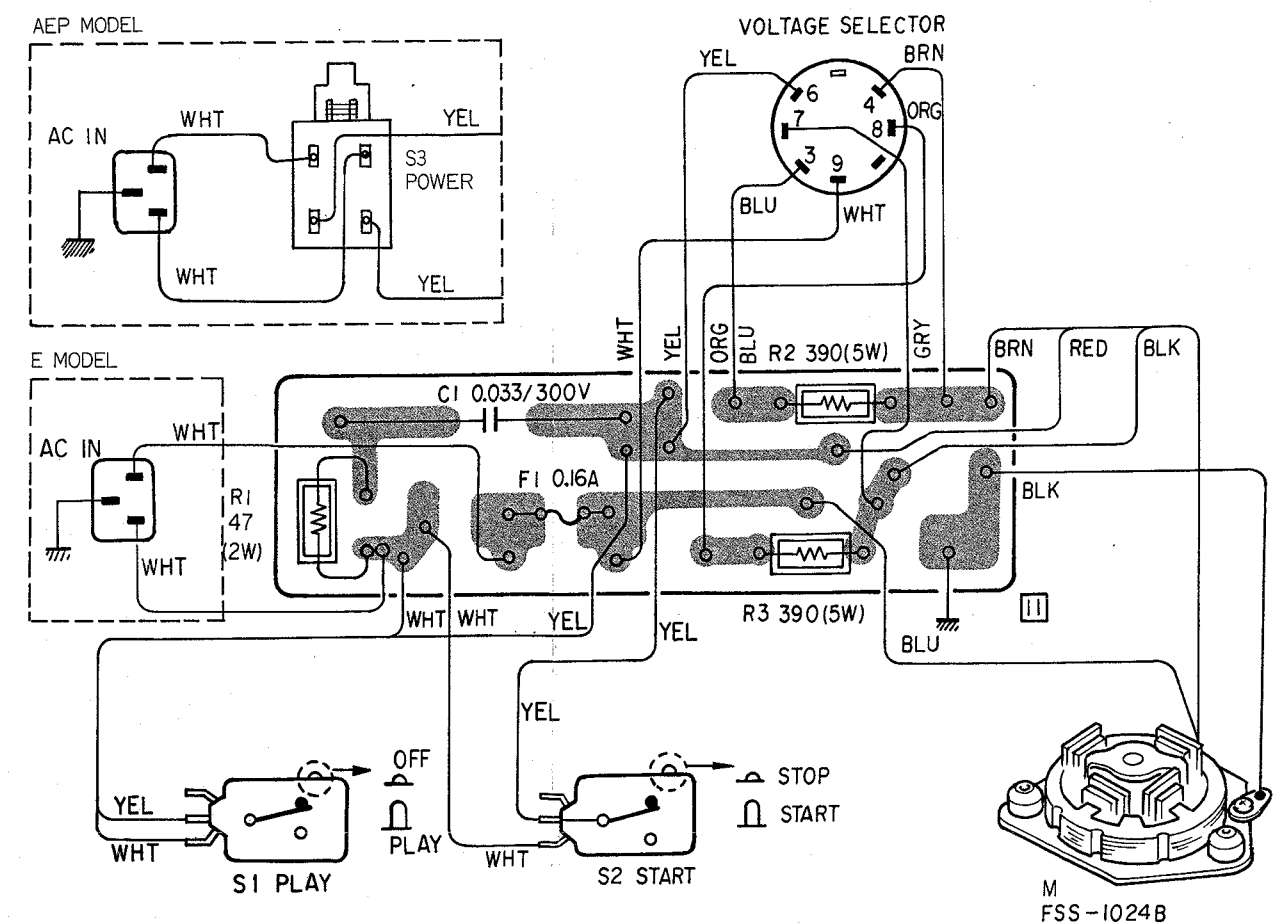
Note: The components identified by shading are critical for safety. Replace only with part number specified.



Note: The components identified by shading are critical for safety. Replace only with part number specified.

E model  
AEP model

Note:  
• : nonflammable resistor.



**C**



D



**Note:** The components identified by shading are critical for safety. Replace only with part number specified.

A

B

C

D

1

2

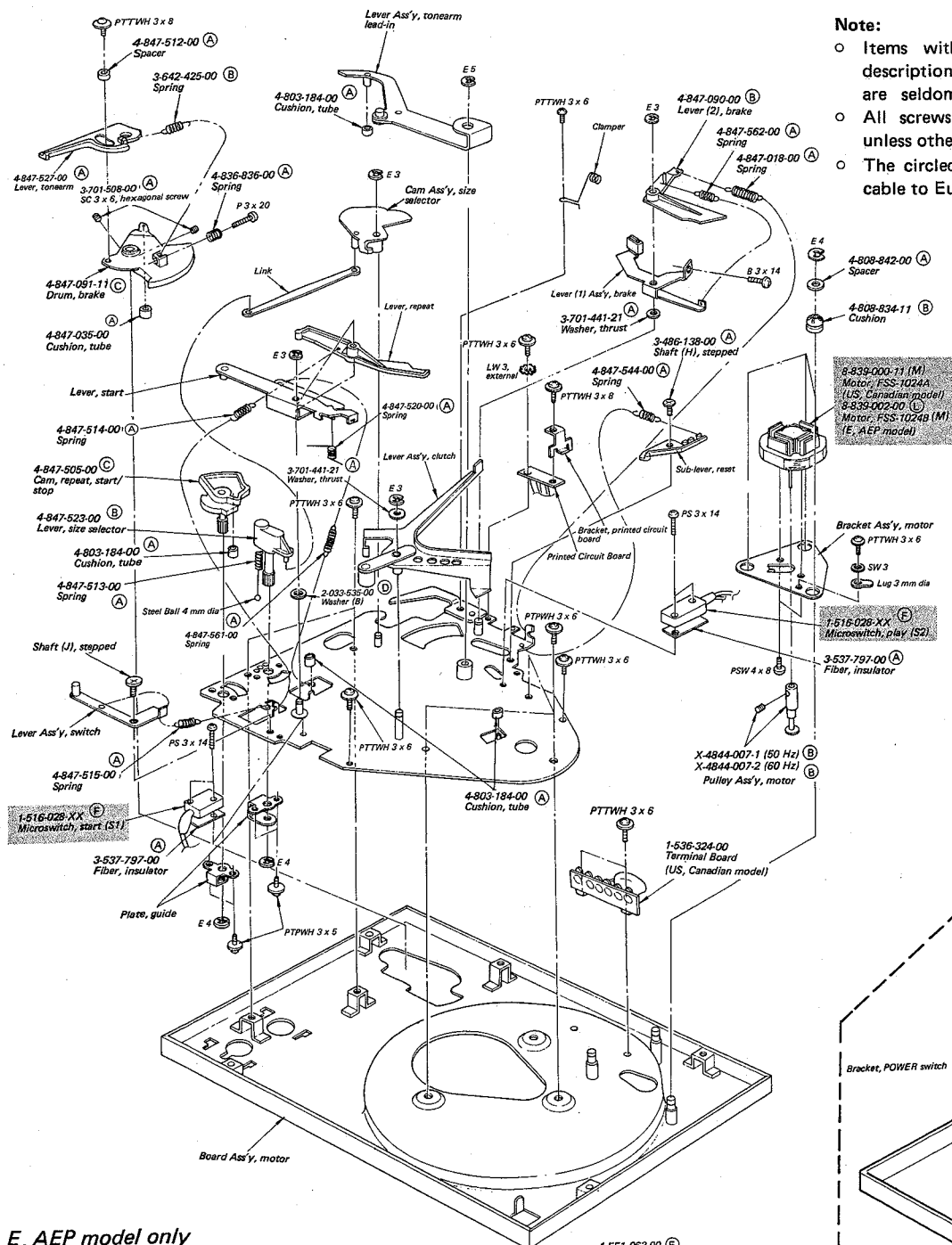
3

4

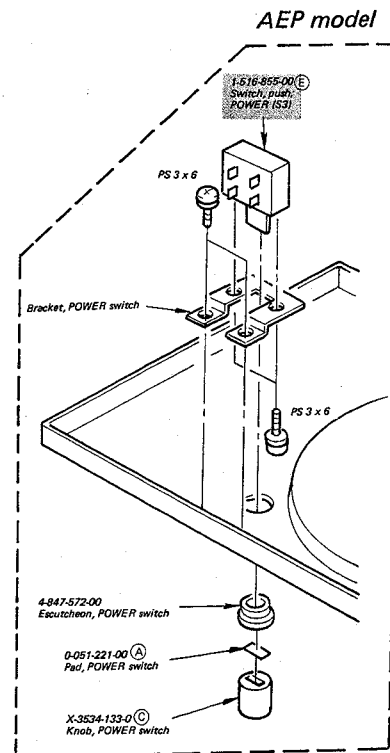
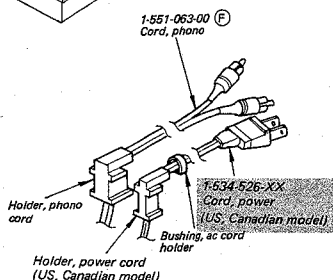
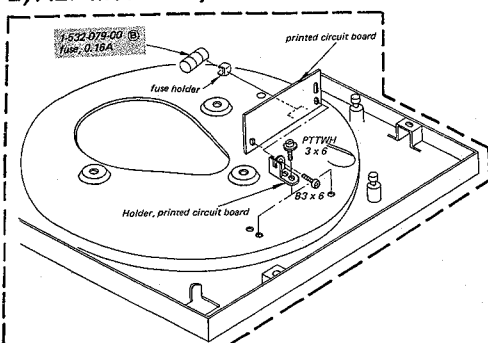
5

## Note:

- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted.
- The circled letters (A) to (Z) are applicable to European model only.



## E, AEP model only



**Note: The components identified by shading are critical for safety. Replace only with part number specified.**

## SECTION 7 ELECTRICAL PART LIST

Note: The circled letters (A) to (Z) are applicable to European model only.

Ref. No.	Part No.	Description
C1	1-108-750-62	0.033μF mylar (E, AEP model)
CP1	1-101-534-31	Encapsulated Component (US, Canadian model)
M	8-839-000-11	Motor, FSS-1024A (US, Canadian model)
	8-839-002-00	(L) Motor, FSS-1024B (E, AEP model)
R1	1-214-083-11	270 7W metal-oxide (US, Canadian model)
	1-217-220-11	(B) 47 2W wirewound (nonflammable) (E, AEP model)
R2	1-217-317-11	(B) 390 5W wirewound (nonflammable) (E, AEP model)
R3	1-217-317-11	(B) 390 5W wirewound (nonflammable) (E, AEP model)
S1, 2	1-516-028-XX	(F) Microswitch, start, play
S3	1-516-855-00	Switch, push: POWER (AEP model)
F1	1-508-620-00	(B) Connector, tonearm pipe
	1-509-547-00	(C) Connector, 3P (E, AEP model)
	1-509-550-00	(F) Connector, shell head
	1-532-079-00	(B) Fuse, 0.16A (E, AEP model)
	1-534-526-XX	Cord, power (US, Canadian model)
	1-536-324-00	Terminal Board (US, Canadian model)
	1-549-073-00	(L) Cartridge, VL-32G (Canadian, E, AEP model)
	1-549-074-00	(K) Stylus, ND-134G (Canadian, E, AEP model)
	1-551-063-00	(F) Cord, phono
	1-552-026-00	(E) Voltage Selector (E, AEP model)

### ACCESSORIES & PACKING MATERIALS

X-4847-522-0	(E) Carton Ass'y
1-551-216-00	Cord, power (E model)
2-054-619-00	(A) Spacer, cartridge
2-054-624-00	Screw (large), cartridge (US model)
2-054-625-00	Screw (small), cartridge (US model)
2-227-313-00	Spacer, cartridge (US model)
2-064-121-00	Card, 60Hz
2-064-122-00	Card, 50Hz
3-701-438-21	Washer, plastic; 2.5mm dia (US model)
3-701-630-00	(A) Bag, plastic; instruction manual

Ref. No.	Part No.	Description
	3-701-806-01	(A) Adaptor, 45 rpm
	3-780-973-11	(B) Manual, instruction (E, AEP model)
	3-780-973-21	Manual, instruction (US model)
	3-780-973-21	Manual, instruction (Canadian model)
	3-794-030-31	
	3-793-395-00	(B) Gauge, overhang adjustment
	4-815-655-01	Nut, cartridge (US model)
	4-834-105-00	(A) Sheet, plastic
	4-838-319-01	Screw (middle), cartridge (US model)
	4-843-577-00	(A) Sheet, top cover
	4-844-059-00	(B) Bag, plastic; platter turntable
	4-844-060-00	(C) Bag, plastic; unit
	4-847-092-00	(C) Screwdriver
	4-847-565-00	(C) Cushion, bottom
	4-847-566-00	(C) Cardboard
	4-847-568-00	(F) Carton
	4-847-569-00	(C) Cushion, side
	4-847-542-00	(B) Cushion, platter turntable
	9-911-851-XX	(E) Cushion, tonearm pipe (t3)

Note: The components identified by shading are critical for safety. Replace only with part number specified.

Sony Corporation

© 1977